DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

Bay Area Branch
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Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 1.28

WELDING INSPECTION REPORT

Resident Engineer: Casey, William
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-027345
Date Inspected: 21-Mar-2012

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: American Bridge/Fluor Enterprises, a JV

OSM Arrival Time: 700
OSM Departure Time: 1730
Location: Job Site

CWI Name: As noted below

Inspected CWI report:	☐ Yes	☑ No	☐ N/A	**CWI Present:**	☑ Yes	☐ No	
Electrode to specification:	☑ Yes	☐ No	☐ N/A	**Rod Oven in Use:**	☑ Yes	☐ No	☐ N/A
Qualified Welders:	☑ Yes	☐ No	☐ N/A	**Weld Procedures Followed:**	☑ Yes	☐ No	☐ N/A
Approved Drawings:	☑ Yes	☐ No	☐ N/A	**Verified Joint Fit-up:**	☑ Yes	☐ No	☐ N/A
				Approved WPS:	☑ Yes	☐ No	☐ N/A
				Delayed / Cancelled:	☐ Yes	☑ No	☐ N/A

Bridge No: 34-0006
Component: SAS OBG

Summary of Items Observed:

Quality Assurance Inspector (QA) Douglas Frey was at the American Bridge/Fluor (ABF) job site at Yerba Buena Island in California between the times noted above in order to monitor Quality Control functions and the in process work being performed by ABF personnel. The following items were observed:

9E PP84.5 E5-DAH (Interior)

This QA Inspector made random observations of the back-gouging operations on the Deck Access Hole (DAH) at 9E PP84.5 E5 on the interior of the OBG. ABF welder Salvador Sandoval (ID 2202) utilized the Carbon Air Arc method to remove weld metal from the weld root side of the joint. The welder was observed employing a small disc grinder, rotary drill w/grinding bit, brushes and compressed air to clean and smooth the joint to clean shiny metal in preparation for Magnetic Particle (MT) testing.

This QA Inspector randomly observed ABF welder Salvador Sandoval perform the Shielded Metal Arc Welding (SMAW) process in the 3G vertical position on the transverse stiffener on the DAH located at 9E PP84.5 E5 on the interior of the OBG. The welder was observed utilizing 3.2mm E7018-H4R electrodes drawing amperage of 124. QC Inspector Steve Jensen was present to monitor the welding and the parameters as the applied to ABF-WPS-D1.5-1010-1. This QA Inspector made subsequent observations throughout the shift to monitor quality and noted that the work is in progress and appeared to be in general conformance with the contract documents.

9W PP84.5 W2-DAH (Interior)

ABF welder Mike Jimenez (ID 4671) was observed continuing post-weld clean-up of the DAH, two (2) Longitudinal Stiffeners and the Transverse Stiffener located at 9W PP84.5 W2 on the interior of the OBG. Mr. Jimenez was observed utilizing the Carbon Air Arc Method to remove the run-off tabs from the end of the joints, a small disc grinder to remove excess weld reinforcement from the crown of the welds, a rotary drill to smooth the rat holes for a smooth transition and general site clean-up to allow Quality Control to perform testing and inspection. This QA Inspector made subsequent observations throughout the shift and noted that the work was in progress.

8E PP70.5 E2-DAH (Exterior)

This QA Inspector randomly observed ABF Quality Control Inspector Jesse Cayabyab performing Magnetic Particle (MT) inspection and Ultrasonic Testing (UT) inspection on the Deck Access Hole at 8E PP70.5 E2 on the exterior of the OBG. This QA Inspector observed that no rejectable MT or UT indications were found. The weld area scanned was 20mm thick.

This QA Inspector performed a MT Inspection on the DAH at 8E PP70.5 E2on the exterior of the OBG. This QA Inspector performed the yoke method in conformance with ASTM E 709 and the standard of acceptance with D1.5 section 6.26. This QA Inspector noted that no rejectable indications were found at the time of testing. This QA Inspector generated a TL-6028 MT report on this date. The completed work at this location appeared to be in general conformance with the contract specifications.

This QA Inspector performed a UT inspection on approximately 10% of the welds on the DAH at 8E PP70.5 E2 on the exterior of the OBG. These welds were previously accepted by QC Ultrasonic technicians in accordance with AWS D1.5-2002, section 6, table 6.3. This QA observed no rejectable indications at the time of testing. This QA generated a TL-6027 UT report on this date. The completed work observed at this location appeared to be in compliance with the contract specifications.

13E/14E-LS4, LS5 (Interior)

This QA Inspector randomly observed ABF Quality Control Inspector John Pagliero performing Magnetic Particle (MT) inspection and Ultrasonic Testing (UT) inspection on 13E/14E-Longitudinal Stiffener #4 and 5 on the interior of the OBG. This QA Inspector observed that no rejectable MT or UT indications were found. The weld areas scanned were 35mm and 30mm thick respectively.

This QA Inspector performed a MT Inspection on 13E/14E-Longitudinal Stiffener #4 and 5 on the interior of the OBG. This QA Inspector performed the yoke method in conformance with ASTM E 709 and the standard of acceptance with D1.5 section 6.26. This QA Inspector noted that no rejectable indications were found at the time of testing. This QA Inspector generated a TL-6028 MT report on this date. The completed work at this location appeared to be in general conformance with the contract specifications.

This QA Inspector performed a UT inspection on approximately 10% of the welds on 13E/14E-Longitudinal Stiffener #4 and 5 on the interior of the OBG. These welds were previously accepted by QC Ultrasonic technicians in accordance with AWS D1.5-2002, section 6, table 6.3. This QA observed no rejectable indications at the time of

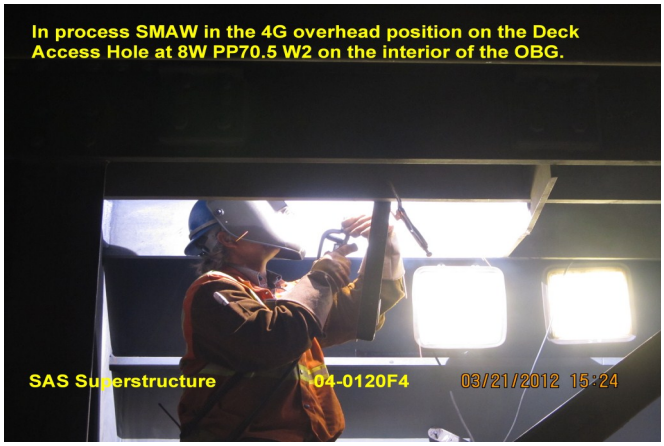
testing. This QA generated a TL-6027 UT report on this date. The completed work observed at this location appeared to be in compliance with the contract specifications.

8W PP70.5 W2-DAH (Interior)

This QA Inspector made random observations of Shielded Metal Arc Welding (SMAW) of the Deck Access Hole (DAH) located at 8W PP70.5 W2 on the interior of the OBG. ABF welder Eric Sparks (ID 3040) was observed welding in the 4G overhead position utilizing 3.2mm E7018-H4R electrodes that were obtained from a remote baking oven verified by this QA Inspector. QC Inspector Steve Jensen was present to monitor the welding and the parameters to ensure compliance with ABF-WPS-D1.5-1010-Revision 1. The welder was observed cleaning the work between passes and employed a small disc grinder to blend the start/stop edges for a smooth transition, as the QC Inspector measured the inter-pass temperatures. This QA Inspector made subsequent observations throughout the shift to monitor quality and noted that the work at this location is in progress and appeared to be in general conformance with the contract specifications.

Summary of Conversations:

As noted above.



Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Nina Choy 510-385-5910 , who represents the Office of Structural Materials for your project.

Inspected By:	Frey,Doug	Quality Assurance Inspector
Reviewed By:	Levell,Bill	QA Reviewer